

# **Generation Electric Interconnection Studies**

Pacific Gas and Electric Company  
March 15, 2001

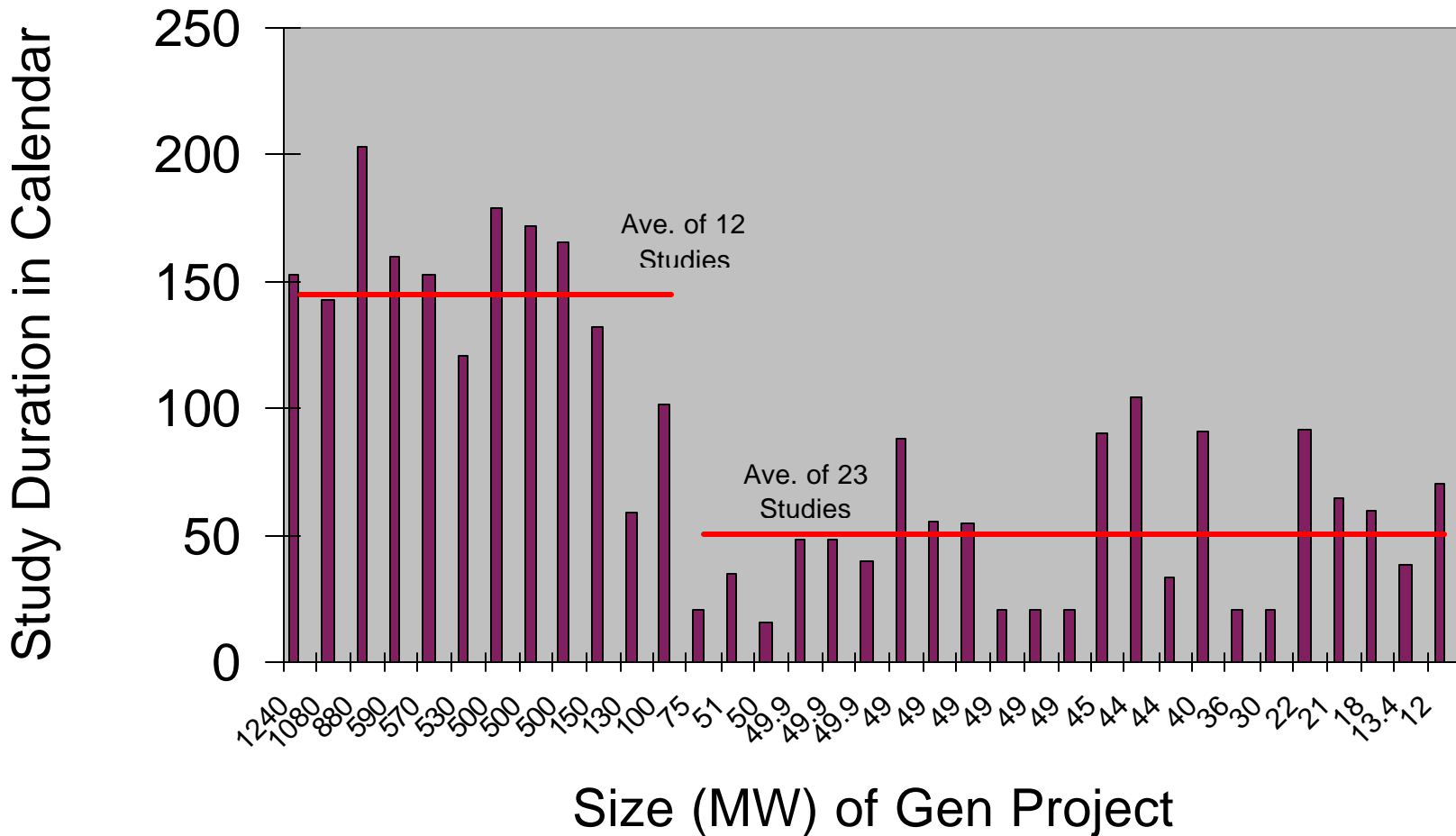
# Study Statistics

- Completed about 35 Studies in 2000-2001.
- Average study time for  $> 100$  MW projects was 145 days
- Average study time for  $< 100$  MW projects was 50 days

# Past Study Performance

Generation Study (completed in 2000-01) Duration

## Generation Study (completed in 2000-01) Duration



# Interconnection Studies

- Three “Traditional” studies conducted in accordance with Transmission Owner Tariff approved by FERC:
  - System Impact Study (SIS) – 60 Days
  - Facility Study (FS) – 90 Days or a total of 150 Days with SIS
  - Expedited SIS/FS – 90 to 120 Days
- Two “Special” Studies:
  - Support ISO Summer 2001 RFB
  - Implement Executive Order D-26-01 (dated 1/17/2001)

# ISO Summer 2001 RFB

- Study Takes 3 to 4 Weeks
- Focused power flow analysis.
- Includes System Protection Evaluation But No Dynamic Stability or Post Transient analysis.
- Includes Facility Costs using typical unit cost data.
- Targeted for Small Size Installations (less than 50 MW) with No significant transmission impacts.

# ISO Summer 2001 RFB

- Studies took 21 days on average.
- 4 projects, 140 MW have signed or are about to sign a Generator Special Facilities Agreement (GSFA) to start PG&E's share of engineering and construction for gas and electricity.
- 6 projects, 285 MW have completed electric and gas interconnection studies and their GSFAs have been sent to generators for signature.

# Executive Order D-26-01

- Study Takes 7 Days.
- Focused power flow analysis.
- Includes Short Circuit Study But No Dynamic Stability or Post Transient analysis.
- Excludes Facility Cost Information.